

# Creating **INSPIRE-ational** research projects!

“Two heads are better than one!” is a great philosophy for planning a research project. Involving your school Media Specialist in the formulation of your project will insure the age appropriateness of the project, the availability of relevant sources, expose students to information literacy skills and standards, suggest strategies for problem-based learning, authentic assessment and interdisciplinary possibilities. Before beginning a research project, the following suggestions will assist teachers in instructional planning. Together with your Media Specialist you can decide on the research model and assessment that best fits the project and your students.



## **Instructional Planning**

Instructional planning begins by collaborating with your Media Specialist. Collaboration will blend expertise in gathering appropriate materials, integrating technology, and formulating the process to complete the remaining steps in instructional planning.

1. **Identify content and standards to be addressed.** With your Media Specialist, brainstorm possible questions, topics, activities that most effectively involve students in attaining this information.
2. **Explore the BIG IDEA(S).** When all is said and done, what broad, general, key concepts would you like the students to learn from this lesson?
3. **Brainstorm GUIDING QUESTIONS.** What essential questions should students be able to answer that will lead them to understand or deduce the BIG IDEA(S) or key concepts?
4. **Identify KEY SKILLS and PROCESSES** the students will know and be able to do *by the end of the project*.
5. **Decide how students will be ASSESSED.** What performance tasks and rubrics will be used to guide instruction and evaluate student learning?
6. **Describe LEARNING ACTIVITIES** that will take place to lay the fundamental background needed before introducing the research project. The discussions, instruction, use of the text, films, and learning activities should lead the students to the desired SKILLS PROCESSES and BIG IDEA.

This template reflects the 6 Step Instructional Planning Process:

It is a working tool to facilitate collaboration with your Media Specialist

Grade	/	Topic
-------	---	-------

**Indiana Academic Standards: AVAILABLE AT : <http://ideanet.doe.state.in.us/>**

**Content Area:**

**Language Arts:**

(Check all that apply)

**2. RDG COMPREHENSION:**

Structural Features of Information and Technical Materials:

- ☐ Use the features of informational texts, such as formats, graphics, diagrams, illustrations, charts maps, and organization, to find and find information and support understanding

**Comprehension and Analysis of Grade -Level-Appropriate Text:**

- ☐ Recognize main ideas presented in texts, identifying and assessing evidence that supports those ideas
- ☐ Draw inferences, conclusions, and generalizations about text and support them with textual evidence and prior knowledge.

**Expository (Information) Critique:**

- ☐ Distinguish among facts, supported inferences and opinions in text.

**4. WRITING PROCESS**

**Organization and Focus:**

- ☐ Use graphic organizers to plan writing
- ☐ Write informational pieces with multiple paragraphs that offer a concluding paragraph that summarizes important ideas and details

**Research and Technology:**

- ☐ Use note-taking skills
- ☐ Create simple documents using a computer and employing organizational features, such as passwords, entry and pull-down menus, word searches, the thesaurus, and spell checks
- ☐ Use a thesaurus to identify alternative word choices

**5. WRITING APPLICATIONS:**

**Different types of Writing**

- ☐ Write research reports about important ideas, issues, or events

**Information Literacy Skills:**

(Check all that apply)

- ☐ Standard 1: accesses information efficiently and effectively.
- ☐ Standard 2: evaluates information critically and competently
- ☐ Standard 3: uses information accurately and creatively.
- ☐ Standard 4: pursues information related to personal interests.
- ☐ Standard 5: appreciates literature and other creative expressions of information.
- ☐ Standard 6: strives for excellence in information seeking and knowledge generation.
- ☐ Standard 7: recognizes the importance of information to a democratic society.
- ☐ Standard 8: practices ethical behavior in regard to information and information technology.
- ☐ Standard 9: participates effectively in groups to pursue and generate information.
- ☐ Standard 10: understands the nature and operation of technology systems.
- ☐ Standard 11: uses a variety of technology tools to enhance learning, increase productivity, promote creativity, and communicate effectively.
- ☐ Standard 12: uses technology tools to solve problems and make informed decisions.

**Integrated Technologies:** (Word Processing, Web Pages, PowerPoint, Spreadsheets, Video Production,etc.)

**Big Idea(s)/Concepts:**

(Students will understand that...)

**Guiding Questions:**

*(Questions that help us uncover the Big Idea/Concepts)*

- 1.
- 2.
- 3.
- 4.

**Key Skills and Processes:**

Students will know...	Students will be able to...

***Assessment:***

*(How will students demonstrate their learning?)*

<b>Performance Tasks:</b> <i>(Explain, interpret, apply, gain perspectives, demonstrate empathy, extend self-knowledge)</i>	<b>Other Evidence:</b> <i>(Quizzes, tests, homework, etc.)</i>

**Learning Activities:**

*(Activities that lead students to The Big Idea(s) and prepare them for performance tasks)*

**Resources:****Reflections:**

*(What worked, what didn't?)*

## RESEARCH MODELS

There are many research models and processes that provide a methodical guide for *student problem solving* and the research process. Your Media Specialist may have a particular favorite, or together you can investigate some models to find one that suits you and your students.

### Sample Research Models:

## QUEST!

<http://www.ccs.k12.in.us/ISO/LiteracyQuest.htm>

**Q**uestion

**U**se multiple resources

**E**valuate information

**S**ummarize information

**T**echnology integration

**! Wow!!** Look what I've learned about researching!



---

## AGOPP

<http://www.mcps.k12.md.us/departments/isa/elit/agopp/agoppindex.htm>

**A**sk Questions

**G**ather information

**O**rganize information

**P**repare/ Produce information

**P**resent and Assess information



---

## The Big 6

<http://www.big6.com/overview.htm>

1. Task Definition
2. Information Seeking Strategies
3. Location and Access
4. Use of information
5. Synthesis
6. Evaluation



---

## SUCCEED

<http://www.stemnet.nf.ca/~acrawfor/lrc2b.html>

**S**elect and focus topic and information needs.

**U**ncover potential sources of information. Learn how to access them.

**C**ollect, examine, and select suitable resources.

**C**ompile relevant information from selected sources.

**E**valuate, interpret, analyze, and synthesize the information.

**E**stablish and prepare an appropriate format and present the information.

**D**etermine the effectiveness of the whole process.



More Research Models to investigate:

**The Research Cycle** <http://questioning.org/module/cycle.html>

**FLIP IT** <http://members.home.net/ayucht/background.html#top>

**Pathways to Knowledge** <http://www.pathwaysmodel.com/the-model/graphic/>

**I-Search** <http://www.edc.org/FSC/MIH/i-search.html>

**Teaching Information Literacy: The Big Skills Approach to Information**

**Problem Solving** [http://www.itrc.ucf.edu/webcamp/final\\_projects/barney/big6.html](http://www.itrc.ucf.edu/webcamp/final_projects/barney/big6.html)

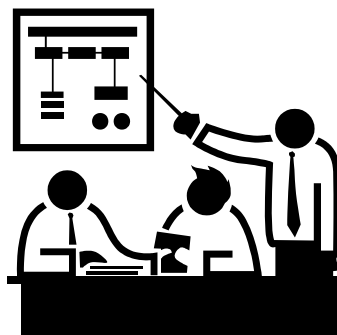
**Comparisons of Information Skills Process Models**

[http://www.big6.com/comparison\\_chart.gif](http://www.big6.com/comparison_chart.gif)

## GRAPHIC ORGANIZERS

Graphic organizers help students organize and analyze the information they collect. A graphic organizer assists students in focusing on topics and note taking. They also provide a visual picture of information that helps the student see patterns and relationships.

By viewing sample graphic organizers with your Media Specialist, you can determine the best choice for your project.



### Sample Research Organizers:

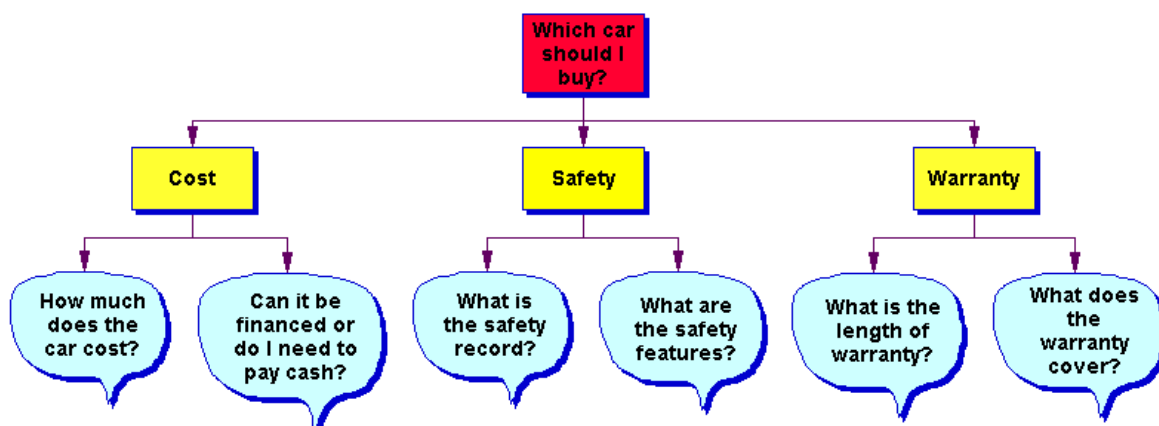
#### K-W-H-L:

Source: <http://www.graphic.org/kwhl.html>

K	W	H	L
<u>W</u> hat do we <u>k</u> now?	<u>W</u> hat do we want to find out?	<u>H</u> ow can we find out what we want to learn?	What did we <u>l</u> earn?

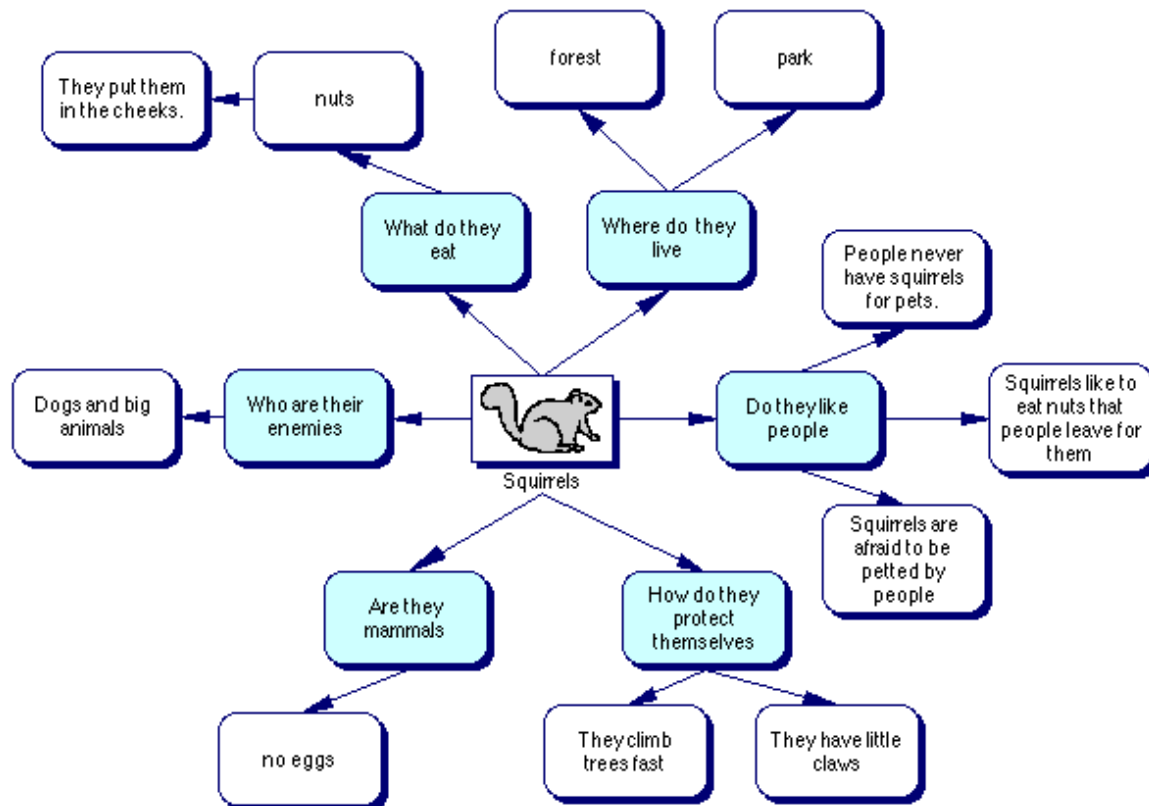
#### Cluster Diagram-Research Cycle

Source: <http://www.graphic.org/cluster.html>



## Research Webs:

Source: <http://www.graphic.org/squirrel.html>



## Information Grids

Source: <http://www.fno.org/oct97/grids.html>

Which was the worst war in U.S. history?			
WAR	Casualties	Damage to Places	Long term Damage to Society
Revolutionary			
Civil War			

World War I			
World War II			
Vietnam War			

## More Research Models to investigate:

Printable Graphic Organizers:

<http://www.teachervision.com/lesson-plans/lesson-6293.html?s21>

Graphic Organizer Generator

[http://www.teach-nology.com/web\\_tools/graphic\\_org/](http://www.teach-nology.com/web_tools/graphic_org/)

## ASSESSMENT

The final piece of instructional planning is deciding how student knowledge and skills will be assessed. Assessment can take many forms: teacher observation, student reflection, products, processes, homework, quizzes and/or test grades. Assessing student projects is best accomplished through the use of rubrics. Rubrics, whether teacher or student generated, are only effective if they are planned before instruction begins and given to students before the initiation of a project to give them a performance target.

### Sample Research Organizers:

Research Skill	Excellent (3 pts)	Satisfactory (2 pts)	Needs Improvement (1pt)
<b>Questioning</b>	Independently discovers an issue or problem which needs a decision or solution	Some adult help needed to focus on issues and problems	Relies on adults to state questions and topics
<b>Sources</b>	Selects high quality sources independently and efficiently	Selects sources with mixed success	Wanders from source to source without questioning which source will be most helpful
<b>Organization</b>	Collects and organizes important information for retrieval independently	Collects information with some degree of organization	Loses track of most important information
<b>Quality of Information</b>	Information clearly relates to the main topic. It includes several supporting details and/or examples.	Information clearly relates to the main topic. Less than 3 details and/or examples are given.	Information has little or nothing to do with the main topic.
<b>Synthesizing</b>	Creates an original decision or solution	Reorganizes and combines strategies of others	Restates the decisions and solutions of others
<b>Evaluating</b>	Tests solutions and	Looks for missing	Reaches a hasty

	decisions to see if supporting information is adequate	information	conclusion
<b>Reporting</b>	Creates and presents an original product which effectively addresses the original problem or issues	Provides a product which offers some insight with regard to the original problem or issues	Shares the thoughts or works of others

## Project Scoring Sheet

Source: <http://www.lessonplansearch.com/Rubrics/>



<b>Process</b>	<b>Below Avg.</b>	<b>Satisfactory</b>	<b>Excellent</b>
1. Has clear vision of final product	1, 2, 3	4, 5, 6	7, 8, 9
2. Properly organized to complete project	1, 2, 3	4, 5, 6	7, 8, 9
3. Managed time wisely	1, 2, 3	4, 5, 6	7, 8, 9
4. Acquired needed knowledge base	1, 2, 3	4, 5, 6	7, 8, 9
5. Communicated efforts with teacher	1, 2, 3	4, 5, 6	7, 8, 9
<b>Product (Project)</b>	<b>Below Avg.</b>	<b>Satisfactory</b>	<b>Excellent</b>
1. Format	1, 2, 3	4, 5, 6	7, 8, 9
2. Mechanics of speaking/writing	1, 2, 3	4, 5, 6	7, 8, 9
3. Organization and structure	1, 2, 3	4, 5, 6	7, 8, 9
4. Creativity	1, 2, 3	4, 5, 6	7, 8, 9
5. Demonstrates knowledge	1, 2, 3	4, 5, 6	7, 8, 9, 10
6. Other:	1, 2, 3	4, 5, 6	7, 8, 9

Total Score: \_\_\_\_\_

Teacher(s) Comments:

---

Rubric Generator Sites:  
[Lessonplansearch.com](http://www.Lessonplansearch.com):

<http://www.lessonplansearch.com/Rubrics/>

**Teach-nology Rubrics generator:**

[http://teachers.teach-nology.com/web\\_tools/rubrics/](http://teachers.teach-nology.com/web_tools/rubrics/)

**Rubistar:**

<http://rubistar.4teachers.org/>

**Rubric Template:**

[http://edweb.sdsu.edu/triton/july/rubrics/Rubric\\_Template.html](http://edweb.sdsu.edu/triton/july/rubrics/Rubric_Template.html)